

10/525422

(12) INTERNATIONAL PUBLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
25 March 2004 (25.03.2004)

PCT

(10) International Publication Number  
WO 2004/025331 A3

(51) International Patent Classification<sup>7</sup>: G02B 26/08,  
21/06, 21/36

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(21) International Application Number:  
PCT/US2003/029332

(22) International Filing Date:  
15 September 2003 (15.09.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
60/411,038 16 September 2002 (16.09.2002) US

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(81) Designated States (national): AE, AG, AL, AM, AT, AU,  
AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU,  
CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE,  
GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR,  
KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK,  
MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT,  
RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR,  
TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

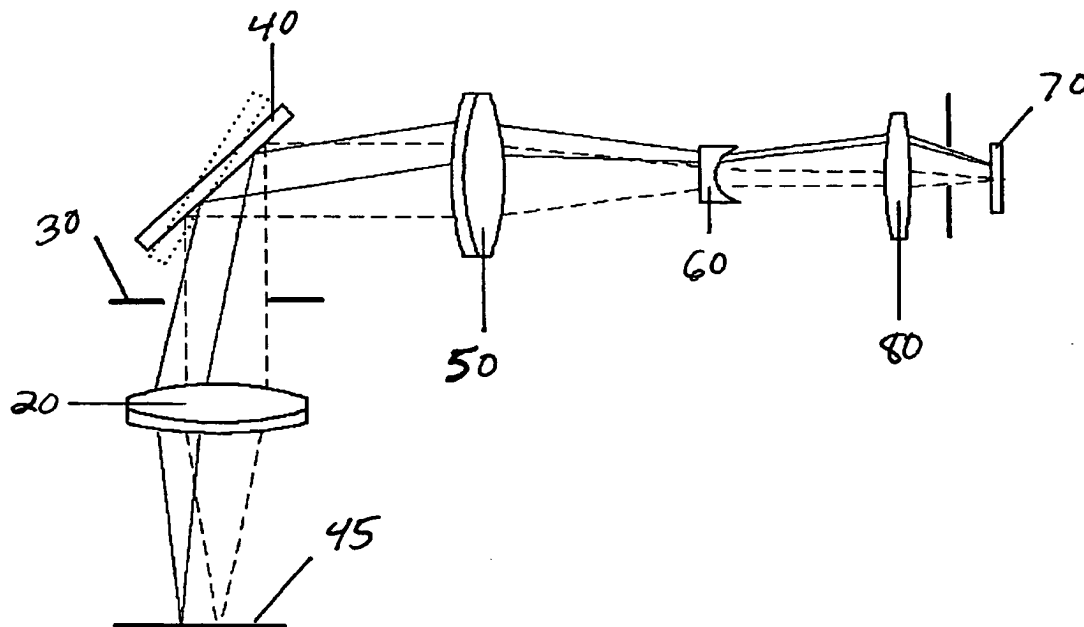
(84) Designated States (regional): ARIPO patent (GH, GM,  
KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),  
Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),  
European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE,  
ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO,  
SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM,  
GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

[Continued on next page]

(54) Title: MICROSCOPE WITH EXTENDED FIELD OF VISION



(57) Abstract: An optical system is provided for creating a mosaic image of a large field of view through a microscope at fast refresh rates of about 25 Hz with a high resolution that is free of blurring or aberrations. The optical system includes an objective lens assembly (20), an iris (30), one or more scanning mirrors (40) for high-speed scanning, one or more imaging lenses and irises (50, 60, 80), and a high-speed imaging device (70) arranged in that order from an object. The optical system also includes a mechanism for processing and constructing scanned and captured images into a mosaic image.

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— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

(88) Date of publication of the international search report:  
13 May 2004

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/US03/29332

**A. CLASSIFICATION OF SUBJECT MATTER**

IPC(7) : G02B 26/08, 21/06, 21/36

US CL : 359/202-203, 215-221, 363, 368-390

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 359/202-203, 215-221, 363, 368-390

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched  
NONE

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

Please See Extra Sheet.

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 5,672,880 A (KAIN) 30 September 1997 (30.09.1997), columns 3-6; figures 2-4.	1-24
Y	US 6,226,392 B1 (BACUS et al) 01 May 2001 (01.05.2001), columns 4-5, 8-10; figures 1-11.	1, 7-9, 11, 12, 14-17, 19-24
Y	US 6,429,967 B1 (AMOS) 06 August 2002 (06.08.2002), columns 3-4; figures 2-3.	4-6, 10, 13, 18
Y	US 6,248,995 B1 (TANAAMI et al) 19 June 2001 (19.06.2001), column 2; figure 2.	1-24

☐ Further documents are listed in the continuation of Box C.
 ☐ See patent family annex.

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"O" document referring to an oral disclosure, use, exhibition or other means	
"P" document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search

07 JANUARY 2004

Date of mailing of the international search report

25 MAR 2004

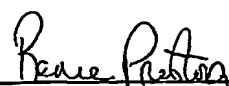
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# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/93/29332

## B. FIELDS SEARCHED

Electronic data bases consulted (Name of data base and where practicable terms used):

USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM\_TDB

search terms: high-speed or fast-scanning, mirrors, iris, imaging lens, achromat, microscope, confocal or scanning,  
high-speed imaging, ccd, cmos, computer